

WHAT IS CLAIMED IS:

1. A retractable rule assembly comprising
a housing assembly;
a reel rotatably mounted in said housing assembly;
an elongated blade formed of a ribbon of metal having one end connected to said reel, said blade extendable from a position tangential to said reel outwardly through a spaced opening in said housing assembly, said elongated blade housing a concavo-convex configuration when extended from said housing assembly, said elongated blade having measuring indicia formed on the concave side thereof, and a clear, protective coating provided on both said concave and convex side of said blade throughout the length of the blade for inhibiting wear of said measuring indicia;
a coil spring formed of a ribbon of metal constructed to rotate said reel in said housing assembly in a direction to wind up the elongated blade when extending outwardly of said housing assembly opening in said concavo-convex cross-sectional configuration onto said reel in an abutting volute coil formation in a flattened cross-sectional configuration; and
a blade holding assembly constructed to hold the blade in any position of extension outwardly of said housing assembly opening and to release the blade from any position in which it is held;
a relatively short free end portion of said blade having a film of plastic material overlying said protective coating on at least one of the convex and concave side of the blade, said film of plastic material having a thickness greater than a thickness of said protective coating.
2. A retractable rule as defined in claim 1, wherein said film is comprised of a material selected from a group consisting of polyurethane, Mylar and Nylon.

3. A retractable rule as defined in claim 2, wherein said film selected from said group is secured to said plastic coating with an acrylic adhesive.

4. A retractable rule as defined in claim 3, wherein said film extends from the free end of the blade to approximately the point where the blade is in said abutting volute configuration when said blade is fully retracted.

5. A retractable rule as defined in claim 3, wherein the length of the portion of the blade covered by said film is approximately 12 inches or less.

6. A retractable rule as defined in claim 5, wherein said film has a thickness dimension within a range of 0.006" to 0.014".

7. A retractable rule as defined in claim 6, wherein said retractable rule further comprises an end hook member formed of sheet metal of a predetermined thickness to include a concavo-convex mounting portion and a U-shaped hook portion that is bent at a generally right angle from an end of said mounting portion, and

said end hook member being mounted on the free end of said blade with the mounting portion of said hook member being secured for limited movement with respect to the free end of the blade so that said rule can be measured externally from an exterior surface of said U-shaped hook portion or internally from an interior surface of said U-shaped hook portion.

8. A retractable rule as defined in claim 3, wherein said film has a thickness dimension within a range of 0.006" to 0.014".

9. A retractable rule as defined in claim 8, wherein said retractable rule further comprises an end hook member formed of sheet metal of a predetermined thickness to include a concavo-convex mounting portion and a U-shaped hook portion that is bent at a generally right angle from an end of said mounting portion,

said end hook member being mounted on the free end of said blade with the mounting portion of said hook member being secured for limited movement with respect to the free end of the blade so that said rule can be measured externally from an exterior surface of said U-shaped hook portion or internally from an interior surface of said U-shaped hook portion, and

wherein said film is adhered to said convex side of said blade from the free end thereof a length that is within a range of from approximately 2" to approximately 12".

10. A retractable rule as defined in claim 8, wherein said housing opening has a height dimension which exceeds the height dimension of said hook member mounting portion and its connection with the free end of said blade an amount which is at least approximately equal to the amount said hook portion extends below said bottom end surface of said housing assembly when at said housing opening.

11. A retractable rule as defined in claim 10, wherein the lateral edges of said mounting portion adjacent said hook portion provide upwardly facing surfaces which engage one or more downwardly facing surfaces defining the housing opening to limit the upward movement of said hook member within said opening.

12. A retractable rule as defined in claim 11, wherein the lateral edges of said blade extend outwardly and upwardly beyond the upwardly facing surfaces of said hook member mounting portion which engage said downwardly facing housing opening surfaces and deflect outwardly prior to

the engagement of the upwardly facing surfaces of said mounting portion, said locking member including a blade engaging and locking free end portion, said locking free end portion including a central recess of a width to operatively accommodate the width of said hook member mounting portion.

13. A retractable rule as defined in claim 1, wherein the film of plastic material has measuring indicia formed thereon.

14. A retractable rule as defined in claim 1, wherein the film of plastic material comprises a plurality of layers of plastic material.

15. A retractable rule as defined in claim 1, wherein the film of plastic material comprises at least one reinforcing member.

16. A retractable rule as defined in claim 15, wherein the reinforcing member is a fiber.

17. A retractable rule as defined in claim 1, wherein the film of plastic material extends across a width of the blade ranging from about 25% to about 100% of the blade width.

18. A retractable rule as defined in claim 17, wherein the film of plastic material extends across 100% of the blade width.

19. A retractable rule according to claim 1, wherein said protective coating comprises a plastic material having a thickness dimension less than about .0035".

20. A retractable rule according to claim 1, wherein said indicia is provided by a layer of paint between said blade and said protective coating, said layer of paint having a thickness of between .0006" - .0014".

21. A retractable rule according to claim 20, wherein said protective coating is formed from a material selected from the group consisting of: polyamides, polyvinyl, polyesters, silicone, polyimides, polyethylene, fluoropolymers and polyethylene terephthalate.